

G13
9:A17
1979
C.2

MADE IN
GENUINE P
448
REDI-
WILSON JONES

N.C. STATE BOARD OF EDUCATION

Accountability report for
vocational education,
fiscal year 1979

DEC 1 1980

NORTH CAROLINA STATE LIBRARY
RALEIGH

N. C.
Doe

ACCOUNTABILITY REPORT FOR VOCATIONAL EDUCATION

FISCAL YEAR 1979

DEC 1 1980

STATE BOARD OF EDUCATION

RALEIGH, NORTH CAROLINA



ACCOUNTABILITY REPORT
FOR
VOCATIONAL EDUCATION

FISCAL YEAR 1979

STATE BOARD OF EDUCATION
RALEIGH, NORTH CAROLINA

DEC 1 1980

10776003-AUGUSTA

TABLE OF CONTENTS

	Page
LIST OF TABLES	iii
CERTIFICATIONS	iv
INTRODUCTION	1
PART I. COMPARISON OF PROJECTED AND ACTUAL ENROLLMENT AND COMPLETIONS	2
Section A. Secondary	3
Section B. Post-Secondary	8
Section C. Adult	11
PART II. PROJECTED ACTIVITIES AND BENEFITS AND ACTUAL ACCOMPLISHMENTS BY PURPOSE OF THE ACT	13
Section A. Secondary	14
Section B. Post-Secondary	28
Section C. Adult	32
PART III. SUMMARY OF STATE BOARD EVALUATIONS	38
Section A. Secondary	38
Section B. Post-Secondary	43
PART IV. CONSIDERATION GIVEN EACH RECOMMENDATION OF THE STATE ADVISORY COUNCIL	45

LIST OF TABLES

	Page
Table 1. Projected and Actual Enrollments and Completions for FY79 - Secondary	3
Table 2. Projected and Actual Enrollments and Completions for FY79 - Post-Secondary	8
Table 3. Projected and Actual Enrollments and Completions for FY79 Adult	11
Table 4. Projected Activities and Benefits and Actual Accomplishments by Purpose for FY79 - Secondary	14
Table 5. Projected Activities and Benefits and Acutal Accomplishments by Purpose for FY79 - Post-Secondary . .	28
Table 6. Projected Activities and Benefits and Actual Accomplishments by Purpose for FY79 - Adult.	32
Table 7. Status of Vocational Education Program Completers for 1977-78 as of February, 1979 - Secondary	41
Table 8. Status of Vocational Education Program Completers for 1977-78 Who Were Available For Placement as of February, 1979 - Secondary	42

100°

200° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

300° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

400° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

500° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

600° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

700° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

800° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

900° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

1000° Found two small birds (one a female) and one large bird (a male) in a small clearing in the forest. Both were feeding on the ground. The small bird was a sparrow-like bird with a dark cap and a light belly. The large bird was a large bird with a dark cap and a light belly.

CERTIFICATIONS

All certifications required for the FY79 Accountability Report are included in the State Plan for Vocational Education for Fiscal Years 1981 and 1982, and they apply to both the FY81-82 State Plan and the FY79 Accountability Report which are developed and submitted simultaneously.

These certifications are:

Certificate of State Board - Adoption of Plan

Certificate of Attorney General

Certificate of State Board

Non-Delegation of Responsibilities

Notification to Eligible Recipients to Establish Advisory Councils
Representatives Required in Section 107 Were Afforded Opportunity
To Be Involved

Section 107 Representatives Met

Certificate of Consultants for Sex Equity

Certificate of The State Advisory Council

Certificate of Public Hearing

Certificate of Members of State Plan Group (Sec. 107)

Governor's Sign-Off (A-95)

INTRODUCTION

The purpose of the Accountability Report is to show the extent to which the State has achieved the goals and objectives included in the Annual State Plan for Vocational Education for FY79.

The Accountability Report is divided into four parts as follows:

- Part I. A description of major differences between projected program enrollments and completions and actual enrollments and completions as set forth in the FY79 State Plan, by instructional program area.
- Part II. A description of projected activities and benefits and actual accomplishments as set forth in the FY79 State Plan, by Purpose of the Act.
- Part III. A summary of evaluations conducted by the State including data on completers of vocational education programs.
- Part IV. A description of the consideration given each recommendation in the evaluation report of the State Advisory Council.

Each part, where appropriate, is divided into three Sections - Section A for secondary, Section B for post-secondary, and Section C for adult vocational education.

CONTINUATION

1970 tended to give us an overall satisfaction with the meeting with
the Ministry of Education, and this was due to the positive and friendly way in which
the Ministry accepted our proposal.

Overall we were satisfied initially with our discussions with

Ministry members, especially those from the Curriculum and Methods
Division. However, the discussions with Curriculum and Methods
Division staff did not go well, as they were uncooperative and
unwilling to engage in meaningful

bargaining has conflicts referring to curriculum. All staff
which I met with in that division had no desire to engage in meaningful
bargaining with the Association.

Overall, there was no difficulty in negotiating the agreement with the Ministry of Education, and this was due to the positive and friendly way in which the Ministry accepted our proposal.

A notable exception would have been the Curriculum and Methods
Division, where not a single member was cooperative with the Association, and
this was due to the negative attitude of the Curriculum and Methods

PART I

COMPARISON OF PROJECTED AND ACTUAL ENROLLMENTS AND COMPLETIONS

In the FY79 State Plan for Vocational Education, program enrollments and completions were projected as a basis for providing job skill training to meet employment needs. This portion of the Accountability Report restates those projections included in the FY79 State Plan as well as the actual counts of enrollments and completions by program area for the secondary, post-secondary, and adult levels of instruction.

Tables 1, 2, and 3 are presented in such a format that projected enrollments and completions and actual enrollments and completions may be compared by program area at each level of instruction. Following each of the three tables is a discussion of reasons for deviation from what was projected and a summary of implications for changes in policy.

PART I: SECTION A - SECONDARY

Table 1. Projected and Actual Enrollments and Completions for FY79 - Secondary.

Instructional Program Area	Unduplicated Enrollments			Completions-Available For Employment	
	Projected-Total	Actual-Total	Actual-Grades 11-12	Projected-Total	Actual-Total
Agriculture	27,342	24,318	9,361	3,023	2,970
Distribution	12,985	12,344	9,869	5,446	3,600
Health	5,951	6,570	4,947	798	898
Occupational HE	5,032	5,157	4,750	1,664	1,566
Business & Office	7,124	10,952	9,997	3,074	3,906
Trade & Industrial	56,376	51,173	30,891	10,161	9,536
Consumer & Homemaking	56,881	52,946	XXXXXX	XXXXXX	XXXXXX

¹ Note: "Completions - Available for Employment" does not include program completers who are pursuing further training, who are not available for placement, or whose status is unknown.

Agricultural Education - Secondary

The actual enrollment in Agricultural Education for FY79 was 3,024 students less than projected enrollment. This drop in number from the projection was caused by:

1. The introduction of the scope and sequence for Agricultural Education. When projections were made, many schools followed the policy of allowing juniors or seniors to take one course in Agricultural Education without any pre-requisites and without much regard to employment opportunities. Under the scope and sequence, much of this has been eliminated. The scope and sequence does not eliminate these students from taking a course for the first time at the eleventh and twelfth grades, however, they must enroll in Fundamentals of Agriculture as a modified Level I program.
2. The second reason for the drop was the lack of clear enrollment policies and student guidance in vocational programs at the local level, however accountability and the desire for quality programs at both the State and local levels have resulted in better planning and guidance of students.

The discrepancy in the projected completions in FY79 and the actual number is very minor, less than two percent. Projections that come within 5% of what actually happens in this area are very accurate. The drop in this case appears to have been the drop in senior enrollment for a one year only course in Agricultural Education.

Distributive Education - Secondary

Enrollment in Distributive Education programs was 641 less than projected for FY79. One reason for not reaching the projected enrollment was that Distributive Education teacher-coordinators were not available to expand programs where local education agencies desired to add or expand programs. Another reason for enrollments not expanding to projected numbers was the lack of facilities on the comprehensive high school campus.

Completions from the Distributive Education program were projected at 5,446. Actual completions from the program surpassed the figure (6000), however only 3,600 were available for employment. The continued trend for Distributive Education graduates to need additional education beyond the high school level in order to achieve their fullest potential in the marketing career ladders causes about one-fourth of the graduates to be unavailable for the work force immediately.

Health Occupations Education - Secondary

Enrollment projections have always been conservatively calculated. This approach has been practiced due to the need for at least one year advanced planning and because of the need for total cooperation between the local educational agency and the local health agencies wherein a program(s) may be implemented. FY79 projected enrollments were indicative of the conservative calculations, but the results still reflect figures that are within reason.

When referring to actual completions, reference is made specifically to the students completing the exit-level or capstone course, 7932, Health Occupations Education II. Projected completions conservatively reveal 798 students and actual completions available for immediate employment are 898. Again, these figures are within reason and are not indicative of a saturation of the health industry when State-wide distribution is considered.

It should also be noted that in addition to the number available for immediate employment, 1466 students entered one of the following: post-secondary educational institutions, higher educational institutions, or the military. This difference in projected completions (797) and total actual completions (2,364) most likely illustrates a large number of senior students who are able to enroll in only one course of the scope and sequence, but are considered completers and then pursue further education in their health career interest after high school.

Since FY76, Health Occupations Education has been funded solely by State and local monies. It is the philosophy of Health Occupations Education in North Carolina, contingent upon an already existing community college system and rather rigid state credentialing regulations by health professional specialties, that the secondary program serve primarily as the base for immediate employment only on the non-credentialing assistant level and for further education.

Occupational Home Economics Education - Secondary

In reviewing the figures regarding projected and actual enrollment and completions for FY79, the following interpretation seems appropriate for Occupational Home Economics:

1. Enrollments - The actual enrollment of 5,157 exceeded the projected figure by 125 students. Due to the increased emphasis given to Occupational Home Economics by our State Consultants as they became actively involved in the local planning process during FY77 and 78 there was a greater number of local education agencies and schools willing to expand or redirect existing home economics programs toward this area. Increased emphasis was also given at State and local levels to the inequities in opportunities for employment skill development in areas appealing to female students. Many local plans also acknowledge the fact that employment opportunities were increasing in those occupational areas, and thus added incentive to guidance programs to encourage students to enter those programs.
2. Completions - The 1,566 actual completers was 108 students fewer than projected. Most logically those who did not complete were not adequately screened for entry into the course by the teacher, and may not have possessed the pre-requisite skills as specified in the Program of Studies. These pre-requisites were waived too freely to justify inflating a class enrollment to be able to start a new program without adequate planning time. Many teachers also expressed frustration in not having adequate resources for laboratory experiences to make instruction meaningful for all.

Business and Office Education - Secondary

During FY79, approximately 138,000 students in grades 9-12 were enrolled in one or more courses in the Business Education program. Of the 1,507 business instructors in the State during FY78, approximately 300 were paid from either State or Federal vocational funds.

The FY79 State Plan projected that approximately 7,124 students would be enrolled in capstone business courses being taught by those teachers paid with vocational funds. However, the enrollment data of those teachers who were not paid from vocational funds was also reported. Thus, actual enrollment was reported as 10,952 students in capstone courses.

It was also projected that 3,074 students would be available for employment, but approximately 832 more students were available for employment.

Trade and Industrial Education - Secondary

A number of variables may have contributed to the differences between projected enrollments and actual enrollments for FY79 in Trade and Industrial Education. Perhaps the most significant variable would be that of scope and sequence as prescribed in the Program of Studies. Some local education agencies were providing programs with no scope and/or sequence which permitted them to serve more students. Level II and Level III courses were presented without having the recommended time block and enrollment. An example would be that a Level II course for a two hour block was provided but only for one hour, the Level III course for a three hour block was provided but only for one or two hours and often without regard to the maximum enrollment.

As a result of implementing the Program of Studies, and its more stringent guidelines, many local education agencies were not able to enroll as many students as in prior years. In some situations, Trade and Industrial Education programs were closed and another program implemented which simply would serve more students. In other cases local education agencies allowed students to sign up for more than one vocational course, not realizing the time frame necessary to complete the program.

The completions (projected and actual) were also affected by implementation of the Program of Studies. Some students were not able to complete the program simply because the entire courses (Level I, II & III) were not available.

Consumer and Homemaking Education - Secondary

In reviewing the figures for projected and actual enrollments, the following interpretation seems appropriate for Consumer/Homemaking Education. The difference of 3,935 fewer students actually enrolled than was projected may be explained in several ways.

1. The Spring semester reporting of Fall semester course enrollments is not practical with the current data collection system. This could account for as many as 3,000 to 10,000 or more students, according to our estimates.

2. More local education agencies have followed the practice of encouraging expansion of vocational education into new curriculum offerings to make a more comprehensive vocational education program, including the redirection of two sections of consumer/homemaking courses per new occupational Home Economics offerings.
3. The early release policy of juniors and seniors for work has reduced the in-school population at the same time the teen-age population is decreasing so fewer students were available to enroll than projected.
4. The bulk of our program enrollment is at the ninth grade level for introductory courses, and there has been increasing interference with elective courses from the general education sectors with "required" sequencing of their courses emphasizing 9th grade enrollment (e.g., Social Studies, Health, and Physical Education).
5. To some extent the remediation efforts in North Carolina schools affected enrollments of vocational education classes to make time available to lower ability students for remediation in required basic skill courses.

PART I: SECTION B - Post-Secondary

Table 2. Projected and Actual Enrollments and Completions for FY79 - Post-Secondary.

Instructional Program Area	Unduplicated Enrollments		Completions	
	Projected	Actual	Projected	Actual
Agriculture	4,025	2,592	825	655
Distribution	3,357	3,231	800	467
Health	5,889	6,083	1,572	1,672
Occupational Home Economics	2,550	2,564	315	438
Business and Office	30,115	32,863	5,645	4,745
Technical	14,285	16,417	2,780	2,442
Trade and Industrial	3,358	3,063	550	516
Consumer and Homemaking	XX	XX	XX	XX

ENROLLMENTS - POST-SECONDARY

In reviewing the data for FY79, the total enrollments for post-secondary included some enrollments and completions for long-term adult (vocational education) programs. Adjustments have been made in the projected data to delete the vocational enrollments and completions from the post-secondary line and include them with the adult data (short-term adult). The actual data include vocational enrollments with the adult data.

Agricultural Education

Actual enrollment was 1,433 less than projected. A decline in the enrollment of Agricultural Production accounted for the majority of this decline. This decline occurred at a higher rate than what had been projected. Enrollments in horticulture and forestry were less than what had been projected.

Distributive Education

Actual enrollment was 126 less than projected. Enrollment did not reach the projected level in Finance and Credit, Floristry, and Hotel and Lodging programs.

Health Occupations Education

Actual enrollment was 194 more than projected. The program titles and codes in the Health Occupations Area have been changed; some have been deleted and others have been combined. Because of this, it is difficult to make a comparison. From the data available, increased enrollments occurred in Radiologic, Inhalation Therapy, and Medical Assistant programs.

Occupational Home Economics Education

Actual enrollment was 14 more than projected. Increases occurred in Care and Guidance of Children, and Home Furnishings.

Business and Office Education

Actual enrollment increased by 2,748. Increases occurred in Accounting, Programmers, Filing and Office Machines, Stenographic, and Supervisory and Administrative Management.

Technical Education

Actual enrollment increased by 2,132. Increases occurred in the following technical programs: Civil, Electronic, Environmental, Mechanical, and Police Science.

Trade and Industrial Education

Actual enrollment was 295 less than projected. Enrollment did not reach the projected level in Commercial Art, Diesel Mechanic, Electronic Occupations, Graphic Arts, and Quanity Food Occupations.

COMPLETIONS - POST-SECONDARY

Previously, data on completions were collected by two-digit code. Although, the new reporting system (VEDS) requests data by six-digit code, data have not been collected at this level of detail. The data included in the table are estimated data based upon the number enrolled in the second year of the program; these individuals might be considered as completers.

Post-secondary education is unique in the fact that individuals enroll as part-time students as well as full-time students. Some students are employed on a full-time basis while attending class on a part-time or full-time basis. Enrollment on a continuous basis is not always possible. The following data for the Spring quarter, 1979, illustrate these points.

An average of 56.0 percent of those enrolled during the Spring quarter, 1979, were classified as full-time students. The range of full-time students varied from 46.6 percent for Distributive Education to 76.6 percent for Health Occupations.

An average of 44.3 percent of the students were employed full-time during the Spring quarter, 1979. The range of students employed full-time varied from 21.2 percent for Health Occupations to 57.6 percent for Technical. Data are not collected which would show the relationship between the job an individual holds and the program in which the individual is enrolled.

During the Spring quarter, 1979, there were 39,648 students enrolled. Of this number, 22,203 were enrolled full-time. The enrollment for the year was 66,727. We do not have comparable data which would indicate how many of this number attended full-time for the year. If we could assume that the annual data were similar to the Spring quarter, this would mean about 56.0 percent of the students attended full-time for the full year.

Post-secondary education provides opportunities for students to gain skills which will lead to employment on a time schedule to meet individual needs. Those students that can attend classes full-time can complete a program in two years. Those who need to work and attend classes part-time will take longer to complete a program. Those who are employed full-time may or may not be increasing their skills in relation to their job. It stands to reason if the company for whom they work needs employees with those particular skills, they may advance in employment with their company.

PART I: SECTION C - ADULT

Table 3. Projected and Actual Enrollments and Completions for FY79 - Adult.

Instructional Program Area	Unduplicated Enrollments		Completions	
	Projected	Actual	Projected	Actual
Agriculture	3,200	3,766	320	110
Distribution	19,950	26,266	2,980	311
Health	36,500	54,567	2,473	1,924
Occupational Home Economics	13,800	15,916	2,170	731
Business and Office	20,150	32,445	2,745	171
Technical	3,900	4,493	465	14
Trade and Industrial	104,127	100,518	10,860	5,459
Consumer and Homemaking	36,000	39,005	XX	XX

ENROLLMENTS - ADULT

The data shown in the FY79 State Plan have been adjusted by removing the long-term adult (vocational) enrollments and completions from the post-secondary data and including them with the short-term adult data. The actual enrollments and completions include long-term (vocational) data with adult (short-term) data.

Agricultural Education

Actual enrollment was 566 higher than projected. The increases occurred in short-term adult enrollment in Agricultural Production and Ornamental Horticulture programs.

Distributive Education

Actual enrollment was 6,316 higher than projected. Increases occurred in short-term enrollment in Finance and Credit, Food Services, General Merchandise, Insurance, and Real Estate programs.

Health Occupations Education

Actual enrollment was 18,067 higher than projected. Increases occurred in short-term adult enrollment in Nursing Assistant, Medical Emergency and First Aid, and Safety programs.

Occupational Home Economics Education

Actual enrollment was 2,116 higher than projected. Increases occurred in short-term adult in Clothing Management and Home Furnishings Programs. A decline occurred in Care and Guidance of Children programs.

Business and Office Education

Actual enrollment was 12,295 higher than projected. Increases occurred in short-term enrollment in Accounting, Other Data Processing, Personnel Training, Stenographic, Supervisory and Administrative Management, and Typing and Related programs.

Technical Education

Actual enrollment was 593 higher than projected. Increases occurred in short-term enrollment in Electrical, Electronics, and other technology programs.

Trade and Industrial Education

Actual enrollment was 3,609 lower than projected. Enrollment which did not reach the projected level occurred in short-term enrollment in Welding, Cutting, and other construction and maintenance programs.

COMPLETIONS - ADULT

Completions had been projected completions for short-term adult as well as long-term adult (vocational) programs. The data reporting system (VEDS) has indicated that completers from short-term adult programs are not to be reported unless the program was 500 hours or longer in length.

The projected data include a projected number of completions for short-term and long-term adults. The actual data are an estimate of completers based upon those long-term adults enrolled during the Spring quarter and are anticipated to complete the program. Completions for short-term adults have not been included in the actual data.

Since actual data on completions by six-digit codes have not been collected, comment upon the variation is not possible.

With the introduction of the Super Bowl in 1986, the Saskatchewan Football Association has become involved in the promotion of football at the national level. The Super Bowl has been held in various cities across Canada and the United States.

Football Development

The Association has developed a youth football program which includes the Provincial youth football competition, the Provincial youth football camp, and the Provincial youth football clinic.

The Provincial youth football competition is a six-game tournament held in the fall. The Provincial youth football camp is a week-long camp held in the summer. The Provincial youth football clinic is a three-day camp held in the summer.

Football Officials

The Association has developed a provincial referee program which includes the Provincial referee camp, the Provincial referee clinic, and the Provincial referee competition.

The Provincial referee camp is a week-long camp held in the summer. The Provincial referee clinic is a three-day camp held in the summer.

Football Coaches

The Association has developed a provincial coach program which includes the Provincial coach camp, the Provincial coach clinic, and the Provincial coach competition.

The Provincial coach camp is a week-long camp held in the summer. The Provincial coach clinic is a three-day camp held in the summer.

Football Administrators

The Association has developed a provincial administrator program which includes the Provincial administrator camp, the Provincial administrator clinic, and the Provincial administrator competition.

The Provincial administrator camp is a week-long camp held in the summer. The Provincial administrator clinic is a three-day camp held in the summer.

Football Referees

The Association has developed a provincial referee program which includes the Provincial referee camp, the Provincial referee clinic, and the Provincial referee competition.

The Provincial referee camp is a week-long camp held in the summer. The Provincial referee clinic is a three-day camp held in the summer.

Football Administrators

The Association has developed a provincial administrator program which includes the Provincial administrator camp, the Provincial administrator clinic, and the Provincial administrator competition.

The Provincial administrator camp is a week-long camp held in the summer. The Provincial administrator clinic is a three-day camp held in the summer.

Football Coaches

The Association has developed a provincial coach program which includes the Provincial coach camp, the Provincial coach clinic, and the Provincial coach competition.

The Provincial coach camp is a week-long camp held in the summer. The Provincial coach clinic is a three-day camp held in the summer.

Football Officials

The Association has developed a provincial referee program which includes the Provincial referee camp, the Provincial referee clinic, and the Provincial referee competition.

The Provincial referee camp is a week-long camp held in the summer. The Provincial referee clinic is a three-day camp held in the summer.

Football Administrators

The Association has developed a provincial administrator program which includes the Provincial administrator camp, the Provincial administrator clinic, and the Provincial administrator competition.

The Provincial administrator camp is a week-long camp held in the summer. The Provincial administrator clinic is a three-day camp held in the summer.

Football Coaches

The Association has developed a provincial coach program which includes the Provincial coach camp, the Provincial coach clinic, and the Provincial coach competition.

The Provincial coach camp is a week-long camp held in the summer. The Provincial coach clinic is a three-day camp held in the summer.

Football Officials

The Association has developed a provincial referee program which includes the Provincial referee camp, the Provincial referee clinic, and the Provincial referee competition.

The Provincial referee camp is a week-long camp held in the summer. The Provincial referee clinic is a three-day camp held in the summer.

Football Administrators

The Association has developed a provincial administrator program which includes the Provincial administrator camp, the Provincial administrator clinic, and the Provincial administrator competition.

The Provincial administrator camp is a week-long camp held in the summer. The Provincial administrator clinic is a three-day camp held in the summer.

PART II

PROJECTED ACTIVITIES AND BENEFITS AND ACTUAL ACCOMPLISHMENTS BY PURPOSE OF THE ACT

In the FY79 State Plan for Vocational Education, various activities and benefits were projected as the State's response to the Purposes of the Act. This portion of the Accountability Report restates those projected activities and benefits and documents actual accomplishments by Purpose.

Tables 4, 5, and 6 are presented in such a format that projected activities and benefits are shown, followed by actual accomplishments under each Purpose of the Act at the secondary, post-secondary, and adult levels.

11-1987

STREETS, WOODS AND OAKS IN THE UTAH FOREST
135. JUN 20, 1987 BY R. G. LARSON

INTRODUCED AND NEWLY ESTABLISHED PLANTS FROM A 100' X 100' AREA OF
THE FOREST AND ON SLOPES. 1987-88 SEED CROPS, 1987-88 PLANTING
AND REVEGETATION. PLANTS IN FOREST ARE CLASSIFIED AS "FOREST" AND
"WOODS" AND "Woods" FOR THE FOREST, "Woods" FOR THE WOODS, AND "Woods" FOR THE
BEDROCK AND TERRACE IN FOREST AND WOODS. 1987-88
ESTIMATED CROPS (TUBERS AND LEAVES) WERE DETERMINED AS INDIVIDUAL
PLATE AND CROPS ARE THEN ADDED AND TO THE AREA TO DETERMINE TOTAL CROPS.

PART II: SECTION ECONONDARY

Table 4. Projected Activities and Benefits and Actual Accomplishments by Purpose For FY79 - Secondary.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
<p><u>SUBPART 2</u></p> <p>A. <u>Disadvantaged</u></p> <ol style="list-style-type: none"> Provide learning experiences for disadvantaged youth in vocational education to enable them to meet with success in pursuing vocational education. Provide State level leadership and State/Federal resources to local units to serve disadvantaged students. Identification of students within existing definition of "disadvantaged." Provide special in-service activities and teaching materials for teachers of disadvantaged. Allocation of Work-Study funds to enable needy disadvantaged vocational students to remain in school. Identify dropouts among disadvantaged students and provide alternative opportunities to enable them to succeed in vocational programs. Programs for limited English-speaking. 	<p>1. Approximately 14,350 disadvantaged students in grades 7-12 will have benefited from special programs to enable them to succeed in vocational education.</p> <p>2. Improvement in programs and instruction from State leadership and allotted funds.</p> <p>3. Improved instruction and services.</p> <p>4. Approximately 800 disadvantaged vocational students will receive financial assistance through Work-Study to enable them to remain in school.</p> <p>5. Approximately 3,000 disadvantaged dropouts and potential dropouts will have received vocational education through Extended School Day Programs.</p> <p>6. Twenty-five limited English-speaking students will develop sufficient communication ability and job skills to obtain employment.</p>	<p>During FY79, a total of \$3,965,443 was used to serve 9,298 students identified as being academically or economically disadvantaged. Of the total amount expended, \$165,855 were carry-over funds from FY78.</p> <p>The State Plan projection for FY79 was \$3,954,388 to serve approximately 14,350 students. These data included students enrolled in special programs and taught by teachers who are paid from disadvantaged funds. Sufficient data are not available on disadvantaged students enrolled in regular vocational education programs and those who receive additional assistance by teacher aides, additional instructional supplies and equipment, and guidance services.</p> <p>During FY79, 993 vocational education students identified as being economically disadvantaged, were provided financial assistance through the Work-Study Program. This number represents 193 above the projection.</p> <p>Additional assistance was provided for 40 limited English-speaking students, an increase of 15 over projections.</p> <p>State and locally sponsored in-service programs were conducted to assist teachers and supportive personnel in their efforts to improve instruction and services for disadvantaged students.</p> <p>Students continued to be identified through a committee of professionally trained individuals in each school. After thorough diagnostic work had been completed with each student to determine areas of greatest need (academic or economic), programs were designed and made available or special supportive assistance was provided to insure a student's success in various areas of job preparation.</p> <p>Also, cooperative vocational education programs were made available, as well as special diagnostic services, supportive services, special counseling programs and many other approaches to serving the identified students. Many students were also served with the regular classroom setting through such modifications as reduced class sizes, after-school work, and special conference periods.</p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
<p>B. <u>Handicapped</u></p> <p>Provide Statewide leadership and Federal/State/local resources to provide learning experiences in vocational education for handicapped students according to their special needs and abilities through 145 local education agencies.</p>	<ol style="list-style-type: none"> 1. Handicapped students will be identified by criteria and provided with special vocational education programs and services. 2. Approximately 3,500 students will receive special vocational education and services. 3. Students will be made employable through special programs. <p>During FY79, \$2,375,011 were expended for vocational education programs to serve 3,930 handicapped students. The amount represents \$397,308 over the projection and includes \$657,902 in carry-over funds from FY78. There were 430 more handicapped students served than projected. The increase in the number of students served can be attributed to the increased emphasis and more sophisticated screening techniques being utilized in the identification process.</p> <p>Based on student assessments, Individual Education Programs (IEP) were developed and special programs designed to meet the needs of students.</p> <p>Special Programs were designed for those students who could not be successful in "adjusted" regular vocational programs. In many cases, supportive services were provided to further enhance progress.</p>	<p>A major effort was undertaken to in-service teachers, administrators, and other supportive personnel to improve services to handicapped students. Included in the in-service activities were six eight-day regional workshops, two week-long workshops at North Carolina State University, and a two-day workshop for local administrators. In-service activities were enhanced by more cooperation between the Division of Exceptional Children and the Division of Vocational Education</p> <ol style="list-style-type: none"> 1. Approximately 300,000 students in grades 7-12 will receive vocational education through cooperative use of Federal, State, and local funds. 2. Target groups receiving vocational education at secondary level will consist of: a. Pre-vocational, b. Vocational skill development, c. Disadvantaged, d. Handicapped, and e. Limited English-speaking students. <p>To maintain, extend and improve programs of vocational education; and develop new programs of vocational education through 145 local education agencies in the State.</p> <p>C. <u>Vocational Education</u></p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
		<p>There was projected to be approximately 300,000 students in grades 7 through 12, but the actual figure was 343,708. This is a State duplicated count in that these figures represent total students served. There were 103,176 students served through pre-vocational experiences. There were 110,514 involved in skill development in grades 11 and 12. The remainder of students were served through Disadvantaged/ Handicapped, which has been spoken too in another section of this report, or in C & HE.</p>
		<p>Target groups receiving vocational education benefit by being prepared for various jobs, and the State and each region benefits by having a base of trained persons for entry level employment.</p>
D. <u>Work-Study</u>	<p>Approximately 800 disadvantaged vocational students per year will receive financial assistance through Work-Study, enabling them to remain in school.</p>	<p>A total of 993 vocational education students were provided financial assistance through the Work-Study program.</p>
E. <u>Cooperative Education</u>	<ol style="list-style-type: none"> 1. Cooperative vocational education will be conducted through program areas at skill development levels in 145 local education agencies. 2. Cooperative education programs will be funded with State and local funds and will be conducted by criteria established in the State Plan. 	<p>The estimated enrollment for cooperative programs was approximately 22,000 students and the actual number served was 18,308. The difference in projected and actual occurred partially because of economic conditions involving an anticipated recession causing prospective employers to make a lower number of training stations available.</p> <p>The major benefits derived have been a total of \$41,628,465 wages earned by the 18,308 students. The contribution of these students through taxes more than offsets the expenses of operating these programs.</p> <p>In addition, students are able to learn, and earn much needed income and establish connections through business/industry which may continue in many instances producing a favorable follow-up involving cooperative students.</p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
F. Sex Bias Office Personnel	<p>1. Employ full time person to eliminate sex bias and discrimination in vocational programs.</p> <p>Establish office to fulfill requirements of the Act as stated in the State Plan.</p> <p>2. Progress will be made toward eliminating sex bias and sex stereotyping from vocational programs.</p>	<p>Individual in-service sessions held for program area staff, local directors, regional coordinators, Council on Status of women, and teachers from each program area.</p> <p>Curriculum work involving the identification of areas in the curriculum where issues of sex equity could be infused.</p> <p>Conference held with representatives of 10 teacher education institutions where action plans on how to create awareness and install curriculum revisions on their campuses were written.</p> <p>Analyzed Statewide figures for male and female participation in each program area.</p> <p>Analyzed Statewide teacher makeup in each program area to determine male/female proportions.</p> <p>Detailed analysis of 1974-1979 enrollment figures for male/female. This information has been disseminated to all interested parties.</p> <p>Devised the format for a "Local Plan to Eliminate Sex Bias".</p> <p>Created awareness of Title IX complaint process through the distribution of printed materials to local vocational administrators.</p> <p>Met with regional and local planners during the creation of local applications for vocations.</p> <p>Required that each local education agency have on file a plan to eliminate sex bias.</p> <p>Met with each local director either in a group setting or individually to determine sex equity needs.</p> <p>Recommended that program area staff and support staff look into possible areas of sex bias and discrimination when making site visits.</p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
		<p>Provided input into the Program Review process. Standards relating to concerns of sex equity are now included.</p> <p>Assurance statement developed for the Program Review which pertains to hiring, firing, promotion procedures.</p> <p>Made presentations to participants involved in Work Options for Women, a CETA funded project administered by the Council on the Status of Women.</p> <p>Made presentations to the Skilled Training Improvement Program (STIP) where women are learning non-traditional skilled trades. This is CETA funded and AFL-CIO administered.</p> <p>Acted in a technical assistance role for any local education agency needing help in inservice or planning to reduce sex bias.</p> <p>Gave separate presentations to the State Advisory Council on Vocational Education and the Council on Status of Women.</p> <p>Developed and disseminated a status report on male and female students, teachers, and state staff. This report was distributed to the State Board, the State Advisory Council, the National Advisory Council, the Council on Status of Women, the Commissioner, and the general public.</p> <p>Review the self evaluations required of Title IX.</p> <p>Technical assistance has been offered about Title IX self-evaluation, guidance procedures, and other Title IX information.</p> <p>Participated in meeting with the VESPC.</p> <p>Attended hearings on State Plan and Master Plan.</p> <p>Signed off on State Plan.</p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
G. <u>Industrial Arts</u> Provide State level leadership and State resources to Industrial Arts programs which comply with requirements of the Act.	<ol style="list-style-type: none"> 1. Industrial Arts instructional programs will improve in quality through State leadership, in-service for teachers, curriculum development and additional materials and equipment. 2. Approximately 7,000 Industrial Arts students per year will benefit from programs designed to assist them in making meaningful occupational choices and/or prepare them for entry into advanced trade and industrial or technical education programs. 	<p>State level leadership was provided to each local education agency of the State through on-site visitation and contact with each local director.</p> <p>Inservice education was provided 297 through State-directed inservice at the 1979 Summer Conference and an Energy/Power Workshop. These efforts focused on updating technology and methodology.</p> <p>Curriculum was adopted for Industrial Arts Construction (8140 S-1) and purchased for 100 teachers.</p> <p>A Guide for developing, implementing, and documenting shop safety was completed for dissemination to teachers.</p> <p>Approximately 15,638 students received Industrial Arts instruction in grades 7-12 (13,545 were enrolled below grade 11; and 2,093 were enrolled in grades 11-12). Instruction provided was in keeping with identified purposes of the Act.</p> <p>NOTE: There is a difference of 8,600+ between actual students served through Industrial Arts Education instruction and those projected to be served. This difference is attributed to Federal and State legislation that allowed funding Industrial Arts programs that met specific purposes as previously stated. Many local education agencies utilized Industrial Arts Education for these purposes.</p>
H. <u>Administration</u> 1. <u>State Administration</u> <u>Provide State staff for administration and supervision of vocational education.</u> 2. <u>Local Administration</u> (a) Provide resources and consultant help to 145 local education agencies for local administration, supervision, and evaluation of local programs.	<ol style="list-style-type: none"> 1. Maintenance of State vocational education staff and activities to ensure direction and quality of programs within State. 2. Local planning, administration and supervision will be coordinated at the local level to maintain, expand and initiate new programs of vocational education which will be relevant to student and labor needs. 	<p>Actual accomplishments did not differ significantly from projected benefits.</p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
<p>(b) State and local funds will support a local director for each local education agency.</p> <p><u>SUBPART 3</u></p> <p>A. <u>Research</u></p> <p>Continue Research Coordinating Unit which will provide leadership in research projects in:</p> <ol style="list-style-type: none"> 1. Relating program course priorities to labor market needs. 2. Developing models for training and retraining teachers. 3. Develop and validate system for determining core competencies. 4. Develop and install a comprehensive evaluation and follow-up system. <p>B. <u>Curriculum Development</u></p> <ol style="list-style-type: none"> 1. Provide State leadership and coordination for: -research on curriculum content, development and evaluation procedures -determination and validation of exit competencies expected of students in vocational education -the search, acquisition and dissemination of curriculum information and materials -the in-service of teachers on curriculum development, implementation, and instructional methodology. 2. Provide for the acquisition and/or development of biasfree curriculum materials including course guides, units of instruction, individualized materials for student use, modified materials for use by Disadvantaged/ Handicapped students, and banks of student assessment measures per curriculum area. 	<p>A model for in-service training and updating of vocational education personnel has been developed which assists teachers in relating to the needs of business and industry.</p> <p>Curriculum core competencies are continuing to be validated.</p> <p>A comprehensive Statewide Evaluation System has been developed and field-tested and will be implemented during FY80.</p> <p>Refer to "Summary of Secondary Curriculum Activities FY79" following this table.</p> <ol style="list-style-type: none"> 1. Content and competencies in curriculum will more nearly relate to present and future job needs. A greater percentage of completers should find employment with success. 2. Teachers will have access to current information for planning and managing the teaching/learning process. 3. Students will have access to learning experiences and supplemental learning resources commensurate with their learning styles, needs, and level of development. 4. Students exiting from the program will have access to a competency-based skill record of proficiency levels achieved through the instructional program. 5. Initial steps will have been taken to diminish duplicative curriculum efforts in-state and nationally. 	

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
C. <u>Guidance and Counseling</u>	<ol style="list-style-type: none"> 1. Provide State leadership through adequate staff for Vocational Guidance, Counseling and Placement. 2. Provide resources and consultant services to local education agencies. <p>D. <u>Preservice and Inservice Training</u></p> <p>Provide inservice training for teachers and administrators of vocational education.</p>	<p>A Statewide system of Vocational Guidance, Counseling, and Placement will be maintained and expanded.</p> <p>Vocational Guidance funds will be allocated to local education agencies to provide local staff to serve needs of students.</p> <p>Administration and quality of instruction will improve as result of inservices.</p>
		<p>A comprehensive Master Plan For Guidance for the State of North Carolina has been developed and adopted by the State Board of Education.</p>
		<p>A two-week internship for all new local administrators with State administrators, regional administrators, other local administrators, and teacher educators.</p>
		<p>A two-week internship for all new vocational teacher educators with State administrators, regional administrators, local administrators, and other teacher educators.</p>
		<p>A series of workshops for vocational teachers and administrators who work with disadvantaged/handicapped students.</p>
		<p>A workshop for vocational teacher educators for working with teacher in pre-service programs related to sex equity.</p>
		<p>A workshop for selected teachers to train them to work with other teachers in the areas of sex equity.</p>
		<p>Various conferences and workshops for vocational teachers to improve professional and technical knowledge and skills.</p>
		<p>Data are included in the section on Subpart 2 - Disadvantaged.</p>
		<p>The most severely disadvantaged in areas of greatest need will receive specialized instruction and services to enable them to succeed in vocational education and become employable.</p>
		<p>SUBPART 4 Special Programs for Disadvantaged</p>
		<p>Provide State leadership and resources to qualified local education agencies to serve needs of special disadvantaged.</p>
		<p>SUBPART 5 Consumer and Homemaking</p>
		<p>Provide State leadership in administration and supervision and commit resources to local education agencies for programs in Consumer and Homemaking Education.</p>
	<ol style="list-style-type: none"> 1. Provide for approximately 900 Consumer/Homemaking Teachers in 145 local education agencies 2. Approximately 57,000 students will benefit from Consumer/Homemaking Education. 	<p>Provide for over 1000 Consumer/Homemaking teachers in 145 local education agencies.</p> <p>Actually enrolled 52,946 students in Consumer/Homemaking Education in some school setting where Occupational Home Economics courses were being offered, some for the first time.</p>

Table 4. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
3. Programs will be responsive to needs of both male and female students, and will provide leadership in eliminating sex bias and stereotyping, and will be responsive to changing patterns of men and women in home and world of work.	Programs have made consistent progress in overcoming sex bias with resulting 20% male enrollment in C/H courses. Curriculum and instructional efforts have attended to needs to overcome stereotyping and sex bias with all courses, and especially the introductory level. Emphasis has been added through program reviews to needs for career counseling to help female students face realities of potential employment, and for tasksharing in their homemaking roles.	



Summary of Secondary Curriculum Activities FY79

An overall and continuing purpose of the Division of Vocational Education State Department of Public Instruction is to assure that students exiting from Vocational Education programs in North Carolina have exit competencies commensurate with identifiable job skills and knowledge and transportable geographically within and without the state.

A more specific and continuing goal of the curriculum activities undertaken by the Division during FY79 was to assure that curriculum content and experiences, instructional resources and student assessment are appropriate for diverse student characteristics, are bias free, and are based on valid competency statements for each program sequence in the eight vocational education program areas. To accomplish this goal staff members in the Division have assumed a leadership role in the development and delivery of curriculum information, materials, and services to local administrative and instructional personnel.

Towards this end, the Division of Vocational Education in the North Carolina Department of Public Instruction has accepted as its responsibility the development of competency-based curriculum packages for vocational programs and their dissemination and diffusion to local vocational administrators, teachers, and teacher educators. Package specifications for each program include the following components:

- . A listing of competencies/performance objectives.
- . A competency/test-item bank.
- . A curriculum guide.
- . Sets of student-use materials modified where possible to accomodate specific disadvantages or handicapping conditions. (Sets generally include such items as LAPs, audio tapes, slide/sound packets, transparency masters, filmstrip/cassette, job sheets, drill cards, and job or task simulations.)
- . A class progress chart.
- . An individualized student competency/skill record for reporting student achievement.

The Field Services section of the Division of Vocational Education has primary responsibility for the development and diffusion of vocational education curricula for secondary school programs, grades 7-12.

The curriculum activities described below were accomplished under the direction of program area content specialists and through the leadership and coordination of a special service unit; i.e., the Curriculum Design Unit. Selected curriculum materials were developed using advisory committees consisting of local teachers; teacher educators; postsecondary instructors; consultants from business and industry and employer/employee representatives from selected trade associations; specially-trained teachers; content specialists; and contracted curriculum writers. FY79 curriculum efforts also involved the expertise and technical assistance of research specialists from the Occupational Research Unit for specific development and diffusion activities.

Annual/short-range priorities for curriculum activities were determined by each of the eight program areas and the Division administrative planning group. Working from the long-range and annual priorities, established curriculum activities of several types were initiated and/or completed including:

Major Curriculum Tasks

1. Solicit additional feedback from LD/P, teacher educators as to content of Vocational Education Program of Studies.
2. Rewrite interpretative sections of Program of Studies.
3. Revise all course descriptions for consistency of types of content.

4. Revise supplemental section of Program of Studies.
5. Prepare final copy of V. E. Program of Studies.
6. Distribute and interpret Program of Studies to teachers, teacher educators, Local Directors/Planners, and other appropriate administrators.
7. Establish procedure and form(s) for requesting approval to modify a local scope and sequence.
8. Establish detailed outlines for Program Planning Guides in each program area.
9. Prepare Program Planning Guides for each program area.
10. Distribute and interpret Program Area Planning Guides.
11. Establish procedure for the development of curriculum materials for any course in the scope and sequence.
12. Establish procedure for the revision of materials for any course in the scope and sequence.
13. Prepare document outlining the procedure for development/revision of the curriculum content for courses and course sequence.
14. Interpret curriculum development/revision procedure.
15. Establish and maintain process for the continuous search, location, screening and cataloguing of instructional and evaluative materials for all courses in the scope and sequence.
16. For each course in the scope and sequence, conduct national survey from which to secure a composite listing and/or actual materials for each of the following:
 - .Listings of competencies/performance objectives.
 - .Curriculum guides.
 - .Individualized student materials.
 - .Evaluation instruments and procedures.
17. For each course in the scope and sequence, solicit from all teachers in the state, copies of tests and test items.
18. Establish criteria for critiquing and retaining test items in a bank of tests and test items for each course.
19. Establish criteria and process for determining priorities for curriculum development/revision.
20. Using the established priorities, implement curriculum development/revision procedure in identified courses:
 - .Determine where development/revision needs to coincide with postsecondary development.
 - .Determine job titles for which the curriculum is preparing students.
 - .Identify competencies/task listing.
 - .Submit competency listings for verification.
 - .Write performance objectives for each competency in the verified list.
 - .Develop/secure learning experiences for all performance objectives.
 - .Identify student learning materials and/or sources of same.
21. Establish comparative cost estimates for alternate development/revision procedures.
22. For all courses in the scope and sequence the following is to occur:
 - a. Prepare initial competency listing.
 - b. Submit listings for verification to:
 - .Secondary teachers.
 - .Postsecondary instructors (where applicable).
 - .Teacher educators.
 - .Representative sample of incumbent workers and practitioners.
 - c. Revise competency listings as necessary to result in a verified listing.
 - d. Make decisions as to which competencies in listing (after previous step) are to be "Core" competencies and which "Supplemental."

- e. Sequence core competencies for instructional and learning purposes.
- f. Secure and screen student assessment measures from all available sources for content validity, freedom from bias and psychometric suitability.
- g. Select (and/or develop) a series of student assessment measures for each competency in the listing.
- h. Organize measures into a bank for each program (i.e., course or course sequence) with each series of measures keyed to competencies and providing appropriate instructions for administering, determining proficiency levels and reporting individual student achievement.
- i. Secure and screen curriculum guides/units of instruction from all available sources for suitability of use in North Carolina programs.
- j. Adopt or adapt or develop curriculum guides/units of instruction for each program (i.e., course or course sequence).
- k. Distribute and interpret competency listings, evaluation banks, and curriculum units to all teachers and administrators.
- l. Develop and/or acquire individualized student materials appropriate for students enrolled in the program.

The following chart represents the status of task completion for each identified course from the North Carolina Vocational Education Program of Studies as of June 30, 1979.

Items in Tasks #20 and #22 are being continued for the remaining programs shown in the North Carolina vocational education scope and sequence chart.

TASK COMPLETION SUMMARY

Program Area/Course	Tasks Completed	Number Benefiting		Projected Recycling Date
		Students	Teachers	
<u>Prevocationals</u>				
Occupational Exploration	16-20-22(a-k)	95,760	982	FY81
Introduction to Vocations	16-20-22(a-h)	7,416	152	FY81
<u>Agriculture</u>				
Fundamentals of Agriculture	16-20-22(a-1)	13,336	308	FY81
Agriculture Production I, II, III	16-20-22(a-1)	6,789	346	FY81
Agricultural Mechanics I, II, III	16-20-22(a-1)	3,700	166	FY82
Ornamental Horticulture I, II, III	16-20-22(a-1)	7,007	288	FY82
Forestry I, II, III	16-20-22(a-i)	1,501	56	FY83
Ag Products & Processing I, II, III	16-20-22(a-i)	35	3	FY83
<u>Business and Office</u>				
Introduction to Business	16-20-22(a-1)	8,356	249	FY81
Typing I, II	16-20-22(a-1)	59,983	1,240	FY81
Shorthand I, II	16-20-22(a-1)	7,840	371	FY81
Business Math	16-20-22(a-h)	7,573	201	FY83
Accounting I, II	16-20-22(a-h)	14,536	453	FY82
Office Occupations	16-20-22(a-1)	10,393	519	FY81
Introduction to Data Processing	16-20-22(a-h)	1,898	35	FY82
Business Communications	16-20-22(a-h)	1,162	57	FY83
Recordkeeping	16-20-22(a-h)	3,480	127	FY83
Business Economics	16-20-22(a-g)	748	13	FY83
<u>Distributive Education</u>				
Careers in Distribution	16-22 (a-h)	483	28	FY82
Marketing I & II	16-20-22(a-k)	3,004	128	FY82
Coop. Distributive Education I & II	16-20-22(a-k)	8,974	255	FY82
Fashion Merchandising	16-22 (a-h)	1,706	65	FY83
<u>Health Occupations</u>				
Introduction to Health Occup. Education	16-20-22(a-k)	947	58	FY81
Health Occupations Education I & II	16-20-22(a-1)	6,759	252	FY81
<u>Home Economics</u>				
Personal/Family Living Skills	16-20-22(a-k)	30,837	629	FY81
Advanced Consumer and Homemaking	16-20-22(a-k)	6,420	304	FY81
Family Life Education	16-20-22(a-k)	10,786	335	FY81
Advanced Child Development	16-20-22(a-k)	3,100	148	FY82
Teacher Aide/Child Care Services	16-20-22(a-k)	1,727	97	FY82
Advanced Foods/Nutrition	16-20-22(a-k)	3,903	195	FY82
Food Services	16-20-22(a-k)	1,905	106	FY82
Advanced Clothing & Textiles	16-20-22(a-k)	3,303	185	FY83
Clothing Services	16-20-22(a-k)	1,119	71	FY83
<u>Industrial Arts</u>				
Wood Technology	16-20-22(a-k)	2,834	92	FY82
Technical Drawing and Planning	16-20-22(a-k)	1,597	58	FY82
<u>Trade and Industrial</u>				
Industrial Cooperative Training I & II	16-20-22(a-1)	8,671	317	FY82
Auto Mechanics I, II, III	16-20-22(a-1)	10,459	496	FY82
Masonry I, II, III	16-20-22(a-1)	5,995	364	FY82
Carpentry I, II, III	16-20-22(a-1)	7,254	387	FY82
Technical Drafting I, II, III	16-20-22(a-1)	7,621	287	FY82
Electricity I, II, III	16-20-22(a-1)	2,839	98	FY82
Graphics & Indus. Comm.I, II, III	16-20-22(a-1)	2,979	141	FY82
Welding I, II, III	16-20-22(a-1)	1,062	62	FY82

Additional areas assuming priority for curriculum activities during FY79 were:

- a. The continuous examination and refinement of procedures for the model and process of vocational curriculum planning, development, and delivery.
- b. The continuation of a functioning Curriculum Coordinating Committee with appropriate cross representation to initiate, facilitate, and monitor Vocational Education curriculum activities.
- c. The identification and/or provision of supplementary and supportive instructional materials for use by teachers and students as "back-up" for curriculum and planning guides.
- d. The continuation of activities designed to make vocational materials more available to local personnel through stocking of regional dissemination centers for vocational curriculum materials and the provision of secondary curriculum materials to vocational education teacher education institutions.
- e. The review of curricula and curriculum guides for selected skill areas.
- f. The continuation of curriculum planning and diffusion workshops for vocational teachers and local curriculum specialists.
- g. The continuing attempt to systematically identify, locate, review, access and avoid duplication of curriculum materials developed by other sources both in and out of state.

It should be noted that as secondary level curriculum development activities (such as described above) were initiated by consultants in the Division of Vocational Education, they solicited the participation of postsecondary program development consultants and instructors from the community colleges and technical institutes as writers, content specialists, and technical experts.

Another activity underway which is contributing to articulated curriculum implementation in vocational education was the cooperative planning and sponsoring of simultaneous workshops and other staff development modes for secondary vocational teachers and postsecondary instructors on the implementation of competency-based vocational programs. Through these means, instructional personnel are being prepared to capitalize fully on the articulated curriculum materials being developed for local use.

It is expected that as an outgrowth of the committee's work and the other activities described above, a viable strategy for joint state-level curriculum development and implementation will be initiated and that a model for locally-articulated programs will be diffused.

1919 until 1920, during which period he was first
employed by the State of California.

Upon his return to San Francisco he continued his studies at the University of California, and graduated in 1922 with a Bachelor's degree in Economics. He then began his career in the business world, working for the Bank of America, and subsequently for the First National Bank of San Francisco.

In 1926 he established his own business, the Standard Oil Company of California, which became one of the largest oil companies in the state. In 1930 he sold his interest in the company to the Standard Oil Company of California, and became a director of the company. In 1935 he sold his interest in the company to the Standard Oil Company of California, and became a director of the company. In 1940 he sold his interest in the company to the Standard Oil Company of California, and became a director of the company.

John Dillinger left his business in 1945 to become a member of the Communist Party. He remained a member of the party until his death in 1946.

John Dillinger died on March 22, 1946, at the age of 41. He was buried in a cemetery in Los Angeles, California.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

John Dillinger's life was characterized by his love of freedom and his desire to help others. He was a man of great courage and determination, and his legacy will live on through the generations.

PART II: SECTION E - T-SECONDARY

Table 5. Projected Activities and Benefits and Actual Accomplishments by Purpose For FY79 - Post-Secondary.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
SUBPART 2		
A. Disadvantaged and Limited English-Speaking	<p>Provide tutorial assistance, remedial education, skill development, consumer education, guidance motivational training, job orientation and placement which will assist these target groups to succeed in vocational education.</p>	<p>Data were not collected which would indicate if the students were enrolled in post-secondary or adult programs. Therefore, all data which have been reported for disadvantaged and limited English-speaking appears in this summary.</p> <p>A total of \$1,478,320 was expended to serve 31,261 post-secondary and adult students which had been identified as economically or academically disadvantaged. This was an increase of 5,231 more than projected.</p>
B. Handicapped	<p>Provide counseling, remedial education, tutorial assistance, reader services, interpreter services, work evaluation, skill training, consumer education, motivational training, job orientation and placement which will assist this group to succeed in vocational education.</p>	<p>Data were not collected to determine which handicapped students were enrolled in post-secondary or adult programs. Therefore, the data for post-secondary and adult are combined and listed in this summary.</p> <p>A total of \$725,150 was expended to serve 6,135 handicapped students. This was an increase of 1,135 more than projected.</p>
C. Vocational Education	<p>Provide vocational/technical programs of less than baccalaureate level. Expand, where possible, new and emerging occupational programs</p>	<p>Vocational technical education will be provided for 89,880 full- and part-time students so that they can qualify for employment or upgrade job skills.</p> <p>There were 66,727 part-time and full-time post-secondary students enrolled and 22,858 part-time and full-time long-term adult (vocational) students enrolled. This total is 295 less than projected. An expenditure of \$67,294,605 of Federal, State, and local funds used to provide vocational and technical education to these two groups of students.</p>
D. Work-Study	<p>Provide Work-Study programs to assist selected individuals to continue their vocational programs.</p>	<p>Provide income for 575 students who work for a public or non-profit agency.</p> <p>There were 126 students who were assisted with Work-Study funding. Data were not collected separately to indicate what expenditure of funds was made.</p>

Table 5. Continued

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
E. Cooperative Education	Provide work experience related to program of study through cooperating businesses and industries.	In addition to the above number, an additional 427 post-secondary students were assisted with college Work-Study funding.
F. Energy Education	Provide work experience through cooperating businesses and industries for 850 students.	Data were not collected on the number enrolled in cooperative education programs. The number has been less than 1,000 each year because of the large number of students that are employed full-time or part-time while attending classes.
G. Construction	Incorporate training skills for energy education with air conditioning, heating, and refrigeration curriculum.	Training in solar energy has been incorporated into existing air conditioning, heating, and refrigeration curriculum. Data on expenditures were not collected separately.
H. Sex Equity Personnel	Provide vocational programs to train individuals to install and maintain solar energy equipment.	Expenditures of \$3,617,141 were made during the fiscal year on 24 construction projects in the design or construction phase. Of this number, 11 projects were completed during the fiscal year.
I. Support Services for Women	Expand facilities at two institutions: Southeastern Community College and McDowell Technical Institute.	The activities of sex equity personnel for F779 are listed in the FY80 State Plan.
J. Day Care Services	Full-time individual will assist in monitoring equal educational opportunity in vocational education and eliminating sex discrimination and sex stereotyping in vocational education program.	The activities of sex equity personnel for F779 are listed in the FY80 State Plan.
	Provide counseling, job development, and job follow-up services for women seeking employment in non-traditional areas.	There were 171 women who received services that would lead to gainful employment. Data on expenditures are included in the total for Vocational Education - Subpart 2.
	Provide day care services for children of vocational/technical students, while they are enrolled in vocational education programs.	There were 127 children of students who received day care services which allowed the parent to attend classes. Data on expenditures are included in the total for Vocational Education - Subpart 2.

Table 5. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
K. <u>Program for Homemakers - Heads of Household</u> Provide vocational programs, orientation in how to seek employment, and job placement services.	Provide instruction and program services which will assist 300 homemakers or heads of household to develop employment skills and become employable.	There were 331 homemakers or heads of household that received services directed toward developing employment skills. There was \$20,950 expended to assist in providing these services.
L. <u>Administration</u> Provide for the administration and supervision of vocational education.	Improve the quality of programs, services, and activities.	In addition to this effort, a State funded program of Human Resource Development served 5,218 individuals. Of this group, 18 percent (925) were welfare recipients. Many of these individuals would be heads of households or displaced homemakers.
SUBPART 3		
A. <u>Research</u> Provide contracts to study ways of improving programs.	Continued search for new ideas and techniques will improve the quality of programs offered.	An expenditure of \$29,539,256 was used to provide for the administration and supervision of vocational/technical and adult education. Information is not readily available to provide data on expenditures for the various levels of administration.
B. <u>Guidance and Counseling</u> Provide counseling and guidance services for all students.	Assist to students in selecting program and preparing for entrance into the labor market.	Two projects were completed. One project was that of articulation of curriculum between secondary and post-secondary and the other was the dissemination of occupational education research information.
C. <u>Pre-service and Inservice Training</u> Provide inservice training for instructors and administrators.	Improve quality of instruction and administration.	Expenditures of \$6,581,006 were made to provide guidance and counseling services for vocational/technical and adult students.
		Thirty-four inservice training sessions were provided to 1,383 instructors and administrators from 23 institutions. These sessions were provided by the Division of Staff Development.

Table 5. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
<p>D. <u>Grants to Overcome Sex Bias</u></p> <p>Provide support for activities that are directed toward reducing sex discrimination and sex stereotyping.</p> <p>E. <u>Administration</u></p> <p>Provide for administration and supervision of vocational education.</p>	<p>Elimination of references to sex bias of sex stereotyping in materials and provision of training to counselors, administrators and instructors in effectively overcoming sex bias and stereotyping.</p> <p>Improve the quality of programs, services, and activities.</p>	<p>Data were not collected to indicate what expenditures had been made.</p> <p>Data on administration appear as a part of the data in Subpart 2.</p>
	<p><u>SUBPART 4 Special Programs for the Disadvantaged</u></p> <p>Provide programs, services and activities for the disadvantaged in areas of high youth unemployment or in areas with high dropout rates to assist them to succeed in vocational programs.</p>	<p>Provide instruction and program services to 4,000 young adults to assist them in succeeding in vocational education and in becoming employable.</p> <p>There were 2,442 young adults from areas where high rates of unemployed youth and drop-outs occurred. There were \$10,123 expended to provide services to this group.</p>

Table 6. Projected Activities and Benefits and Actual Accomplishments by Purpose For FY79 - Adult.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
<u>SUBPART 2</u>		
A. Disadvantaged and Limited English-Speaking	Provide instruction and program services for 14,380 disadvantaged and 15 limited English-speaking to assist them to succeed in vocational education.	The data for this category are included in the post-secondary analysis. Data were not collected to indicate if the students were enrolled in post-secondary or adult programs.
B. Handicapped	Provide instruction and program services for 3,900 handicapped to assist them to succeed in vocational education.	The data for this category are included in the post-secondary analysis.
C. Vocational Education	Provide preparatory or upgrading training for 199,939 adults to develop or to increase employment competencies.	<p>There were 22,858 long-term adults (vocational) included in the adult enrollment of 240,966. Included also in this group total were enrolments in the following specific categories:</p> <ol style="list-style-type: none"> 1. Ambulance Attendant - 12,980 (+5,980) 2. Apprenticeship Related - 1,818 (-1,182) 3. Corrections (adult) - Data have been collected, but have not been processed. A total is not available at this time. 4. Volunteer Firefighters - 21,029 5. Human Resource Development - 3,6000 6. New and Expanding Industry - 4,200 7. Remedial - 4,053 (-68)
D. Administration	Provide for the administration and supervision of vocational education.	Improve the quality of programs, services, and activities.
		The data for this category are included in the post-secondary analysis.

Table 6. Continued.

PROJECTED ACTIVITIES	PROJECTED BENEFITS	ACTUAL ACCOMPLISHMENTS
<u>SUBPART 3 Guidance and Counseling</u> Provide counseling and guidance services for all students.	Assistance to students in selecting program and preparing for entrance into the labor market.	The data for this category are included in the post-secondary analysis.
<u>SUBPART 5 Consumer/Homemaking</u> Provide consumer and homemaking programs and activities.	Provide instruction and program services to assist 36,000 adults to become better consumers and home-makers.	Actual enrollment was 3,005 greater than projected. Data on expenditures were not collected.

Summary of Post-Secondary Curriculum Activities FY79

The Program Development Section placed emphasis on the development of competency-based curriculums for technical and vocational curriculums offered in the Community College System during FY 79. In developing these competency-based curriculums the Program Development Section provided assistance to the institutions in curriculum implementation and inservice education.

The development of the competency-based education curriculum project was designed to provide articulation with employers and secondary education to provide a continuity of education/training from the secondary education system through the post-secondary system into employment.

These competency-based curriculums were developed by establishing two committees for each curriculum under development. A working committee consisting of three to seven instructors from the institutions was used to assist in the writing and developing of the curriculum materials. This committee met as often as necessary to complete the work. A curriculum committee consisting of employers, employees, and the working committee of instructors was appointed to review the curriculum materials and to advise as to the validity of the competencies being established. This committee met twice.

The outcomes of the project are competency-based curriculum models with employment competencies validated by a survey of employers, employees, and educators. The specific outcomes of the projects have provided:

- (1) A list of the principal jobs and job descriptions for which the curriculum is designed to prepare employees;
- (2) A validated list of tasks performed by employees on the job;
- (3) The tasks stated as competencies required of employees in performance of job;
- (4) The criterion measures indicating the level of competency required on the job;
- (5) The job competencies matched to the job titles so the curriculum can be designed on a career ladder basis;
- (6) A model curriculum to illustrate how the competencies can be arranged in the curriculum by courses; and,
- (7) Workshops were held to prepare the instructors in the Community College System to use the competency-based curriculum materials.

Materials that were developed include curriculum manuals with course outlines as follows:

- . Manual title: Horticulture Technology - A Competency-Based Curriculum Manual

Outlines included in the manual:

HOR 135 Landscape Drafting
AGR 170 Plant Science
HOR 144 Plant Propagation

HOR 147 Indoor Plants
AGR 201 Agricultural Chemicals
HOR 148 Plant Insects and Diseases
HOR 151 Plant Materials I
AGR 185 Soil Science and Fertilizers
HOR 152 Plant Materials II
HOR 224 Landscape Maintenance
HOR 251 Landscape Planning I
HOR 259 Garden Center Operation
HOR 256 Nursery Management I
HOR 258 Turf Grass Management
HOR 260 Landscape Construction
BUS 195 Small Business Operations
HOR 252 Landscape Planning II
HOR 257 Nursery Management II
HOR 264 Greenhouse Management

- . Manual title: Building an Energy Efficient Home
- . Manual title: Energy Efficiency and Conservation Manual
- . Manual title: Machinist Manual

Outlines included in the manual:

MEC 1101 Machine Shop Theory and Practice
MEC 1102 Machine Shop Theory and Practice
MEC 1103 Machine Shop Theory and Practice
MEC 1104 Machine Shop Theory and Practice
MEC 1118 Introduction to Metals
MEC 1119 Applied Metallurgy
MEC 1117 Machine Repair

- . Manual title: Secretarial Science, Volumes I, II, III

Outlines included in the manual:

BUS 120 Accounting I
BUS 211, 212, 213 Machine Dictation and Transcription
I, II, III
BUS 215 Secretarial/General Office Applications
BUS 110 Office Machines I
BUS 210 Office Machines II
BUS 271 Office Management
BUS 214 Office Procedures (General Office/Secretarial)
PSY 231 Personal Development
BUS 272 Principles of Supervision
BUS 112 Records Management
BUS 106 Shorthand I
BUS 107 Shorthand II
BUS 108 Shorthand III
BUS 206 Shorthand Dictation and Transcription I
BUS 207 Shorthand Dictation and Transcription II
BUS 208 Shorthand Dictation and Transcription III
BUS 183 Terminology and Vocabulary - Business, Legal,
Medical
BUS 102 Typewriting I
BUS 103 Typewriting II

BUS 104 Typewriting III
BUS 204 Typewriting IV
BUS 205 Typewriting V
BUS 273 Word Processing

. Course syllabi:

BUS 271 Office Management
BUS 183 Terminology and Vocabulary - Business, Legal, Medical
PML 3100 Activity Coordinator for Homes for the Aged and Infirm and Family Care Homes

The development of an additional 21 projects was begun during FY 79. These competency-based curriculums will be completed in FY 80.

Two grants for curriculum development of energy conservation curriculum materials were continued during this period. One grant was continued for the development of a course for teaching people to retrofit homes. Eleven documents were developed and disseminated to community colleges and technical institutes under this grant. The second grant was continued to develop energy education courses and to review curriculum programs to include energy savings concepts as a part of the instructional program. Six courses have been developed under this project with three curriculum programs in advanced stages of review for energy education competencies.

The Educational Guide was revised and updated and a companion document was developed for distribution to potential students, industry, and counselors. The Program Development Section has distributed the following quantities of curriculum materials:

Requests	426
Materials Distributed	
Curriculum Guides and Manuals	557
Course Outlines	1,416
Equipment Lists	321
Extension Course Outlines	1,970
Resource Materials	190
Public Information Materials	<u>19,208</u>
	24,088

Two studies were made concerning curriculum requirements. One study was made to determine the number of membership hours required for teaching each curriculum. The second study was made to determine the number of quarter hour credits for graduation from each curriculum. This study has led to the development of policies for curriculum programs.

Consulting services were provided to the institutions for implementing, evaluating and analyzing occupational education needs in the local area. The staff worked with the administrators of the local institutions in preparing curriculum applications for new curriculums to be implemented in the institutions. During FY 79, 83 curriculums were approved by the State Board of Education for implementation.

Workshops and conferences were planned and conducted to assist instructors in learning new techniques and concepts in their field of work and on how to use the competency-based curriculum materials. The staff members worked closely with the administrators of the local institutions to plan and conduct these inservice education programs and to upgrade teacher competencies in the teacher's area of occupational education. Through this means, new concepts of the program area were taught to the teacher.

Twelve major inservice education conferences were held for various groups of instructors in the System.

PART III: SECTION A

SUMMARY OF STATE BOARD EVALUATIONS - SECONDARY

The North Carolina evaluation system, currently in the developmental stages, builds on and integrates existing evaluation and data collection activities into a cohesive information system. The system, to eventually be based on individual records of students and teachers, will incorporate student characteristics and in-school experiences, student achievement, and follow-up information. This information will be supplemented by program reviews.

Purpose of Evaluation

Evaluation is intended to document programs' short- and long-term effects on students' occupational experience. This information will be used as a basis for program improvement and for accountability.

Description

The North Carolina evaluation system is described below in terms of each of its components: Student Enrollment, Teacher Data, Student Competency Assessment, Follow-Up, Program Review, and Administrative Review.

Student Enrollment Component

The Student Enrollment Component will consist of a cumulative record for secondary students from the time they enter a program until the time of exit. The individual student records will contain information on student characteristics, course enrollment, teachers they were assigned to, and competency levels for each course completed. The record will be up-dated each year until a student exits. At exit, each record will be completed by the school, to show the reason for leaving and the most current mailing address. The individual file will then be removed from current enrollments and placed in a former student follow-up file.

Teacher Data Component

Teacher information will be collected on an individual record basis and include education, experience, in-service training, and program assignment. The teacher's social security number will be used to provide linkage between student enrollment files and the instructional staff files, so that each teacher may be traced to all his or her current or former students. This information will be updated annually, as each teacher completes a new form at the beginning of the academic year.

Student Competency Assessment Component

North Carolina's State Department of Public Instruction (SDPI) has put forth an intensive effort to develop a system for evaluating student achievement. Tests for many occupational areas have been developed by SDPI staff to test student

competency levels, both during the course of their education and at the time of exit. As noted, a score for each course completed will be added to the student's individual cumulative records. A final competency test score and teacher assessment of work readiness will also be added to the individual cumulative files for every student completing the program. Testing procedures will be carried out by instructors and other school staff.

Follow-up Survey Component

The first year follow-up survey will be based on all "program leavers" and all "program completers." The surveys, conducted one year after student exit, will request that former students provide information on employment and identify employers. Fifty percent of employers will then be surveyed. A fifty percent sub-sample of leavers and completers will be contacted again after three and five years of program exit. Responses to each survey will be recorded on the individual student records. When the fifth year follow-up has been completed, a complete history of each student in the sample will be available on individual records, including in-school course enrollment, competency scores, and a longitudinal report on employment experience. These files will be maintained in a central State MIS system. It is therefore possible to develop a district profile by program and by school to indicate the students' occupational records in a detailed way.

Program/Administrative Review Component

The program review, conducted on a five-year cycle, is intended to expand on the statistical profiles and self-study findings to clarify the total picture of program operations. Prior to the actual review, districts and the SDPI staff will have access to a district profile which will indicate, on the basis of student enrollment, student achievement, and follow-up data, the relative effectiveness of programs in preparing people for the world of work. The review focuses on program objectives, staff, curriculum, facilities and equipment, administration, counseling and placement services, and council input. The evaluation includes a locally conducted program self-study and the SDPI based on-site team review.

Use of Information

Student enrollment and instructional staff records will be used to provide the SDPI and LEA's with a statistical overview of program effectiveness in each occupational area, including students' competency levels and post-program experiences. Program Review findings from both the self-study and the on-site visit, will be discussed by the LEA and SDPI and provide the basis for deciding what corrective action (if any) is needed by either the district or the SDPI to strengthen program weaknesses.

Schedule of Implementation

This section provides overall projections for the development and installation of the Vocational Education Statewide Evaluation System. Because of limited staff and financial resources, and because of peculiarities inherent to the installation of the System itself, installation will occur in a logical series of phases.

Installation began in school year 1978-79 with projections for most of the System to be operational during school year 1980-81.

By design, the Student Enrollment and Teacher Data Components must be operational before the Follow-Up Component can be installed. Even so, the Follow-Up Component, because of the requirement to follow-up the one, three, and five-year populations, will require a five-year period for complete installation. The Program Review and Administrative Review Components, though involving the greatest number of staff members at the State level, are rather straightforward in design and were field-tested during school year 1978-79.

Field-Test of the Program Review Component

The Program Review Component was subjected to an intensive field-test in nine local education agencies during the Spring of 1979. The purpose of the field-test was to assess the practicality of the instruments and the logistics of the system and to detect necessary revisions and modifications to be made prior to implementation in 1979-80. As part of the field-test, formal reactions were solicited from all local directors and teachers involved in the field-test, a total of nine local directors and 482 teachers. In addition, as part of the field-test, a consortium of teacher educators was contracted with to provide a third-party assessment of the Program Review process. Twenty-two teacher educators from seven universities participated in the third-party assessment. From these two activities, many useful suggestions were gathered which assisted in revising the Program Review process. The procedure was revised and readied for implementation in the Fall of 1979.

Data on Completers of Vocational Education Programs

As a part of the overall evaluation system, the State collects follow-up information on completers of vocational education programs. Tables 7 and 8, which follow, present a summary of those data. The data were collected in the Spring of 1979 and were for those former students who completed vocational education programs as of June, 1978.

Table 7. Status of Vocational Education Program Completers For 1977-78 as of February, 1979 - Secondary.

Instructional Program Area	Status Unknown	Pursuing Further Training	Not Available For Placement	Available For Placement
Agricultural Production	14 2.5%	123 21.7%	129 22.7%	302 53.1%
Non-Farm Agriculture	117 2.3%	1,684 33.6%	603 12.1%	2,607 52%
Business and Office	138 2.4%	2,318 41.0%	280 5.0%	2,908 51.6%
Distributive	213 3.4%	1,791 28.3%	499 7.9%	3,826 60.4%
Health	48 2.1%	1,275 55.9%	236 10.4%	720 31.6%
Occupational HE	78 2.9%	923 34.5%	289 10.8%	1,389 51.8%
Trade and Industrial	349 2.2%	4,226 26.8%	2,121 13.4%	9,098 57.6%
Total	957 2.5%	12,340 32.2%	4,157 10.9%	20,850 54.4%

Table 8. Status of Vocational Education Program Completers for 1977-78 Who Were Available for Placement
as of February, 1979 - Secondary.

Instructional Program Area	Total Available For Placement	Employed In Training Related Field	Employed In Non-Training Related Field	Unemployed
Agricultural Production	302	226 74.8%	68 22.5%	8 2.7%
Non-Farm Agriculture	2,607	1,497 57.4%	953 36.6%	157 6.0%
Business and Office	2,908	1,937 66.6%	741 25.5%	230 7.9%
Distributive	3,826	2,857 74.7%	764 19.9%	205 5.4%
Health	720	290 40.3%	381 52.9%	49 6.8%
Occupational HE	1,389	678 48.8%	502 36.1%	209 15.1%
Trade and Industrial	9,098	5,609 61.7%	3,142 34.5%	347 3.8%
Total	20,850	13,094 62.8%	6,551 31.4%	1,205 5.8%

PART III: SECTION B

SUMMARY OF STATE BOARD EVALUATIONS - POST-SECONDARY/ADULT

The North Carolina Community College System, since its inception in 1963, has considered the concept of evaluation, both institutional and programmatic, as a vital component for insuring educational quality. The State Board of Education, local administrative boards, and institutional administrators have been committed to the development and implementation of a systematic evaluation process. To reflect this, in 1966, the State Board of Education mandated to the Community College Advisory Council the development of Standards and Evaluative Criteria for the purpose of designing an instrument that could be used to assess the quality of the 57 institutions. Also, the State Board of Education established the Division of Institutional Evaluation and appointed a director to coordinate all evaluation and accreditation activities for the Community College System. The developed document provides eight standards that are used to evaluate institutional responsibility. Since 1969, these Standards and Evaluative Criteria have been used extensively by institutions as guidelines for institutional operation and development. Also, this document is used by the institutions in conducting self-studies for accreditation by the North Carolina State Board of Education and the Southern Association of Colleges and Schools. To date, all 57 institutions have achieved both State and Southern Association accreditation.

Standard III of the Standards and Evaluative Criteria document addresses educational programs. This section includes college transfer, technical and vocational programs. There are more than 200 criteria within this section which is divided into three distinct areas: curriculum, admissions, and instruction. This section of the Standards and Evaluative Criteria document is used primarily in program evaluation, both in a formal and informal manner by the 57 institutions.

There are other areas of continuous evaluation that contribute to the overall effectiveness of program improvement with the 57 institutions.

As a requirement by both regional and State accreditation agencies, each institution is responsible for conducting periodic evaluations of faculty and instructional effectiveness. Evaluation of faculty is normally conducted quarterly, not only by supervisors and students, but also by a self-appraisal by each faculty member. The results are usually compiled and reviewed by the faculty member and immediate supervisor. Strengths and weaknesses are discussed and avenues are explored for improvement whenever deemed necessary.

Evaluation of instructional effectiveness is also conducted periodically. Information is obtained from both current and former students, as well as from employers of graduates and early leavers. This information is compiled and disseminated to appropriate personnel.

Placement and follow-up is another form of program evaluation. It provides an opportunity for evaluating the effectiveness of programs in placing students in jobs related to their major programs of study and their goals.

Another area of service and evaluation for the 200-plus programs offered by the 57 institutions is the Division of Occupational Services and the Division of College Transfer. Experienced consultants are provided at the State level to assist institutional personnel in staff development, program design, program evaluation, and other support.

The Occupational Services Division of the Department of Community Colleges recently developed a competency-based curriculum process to develop competencies for the vocational and technical curriculums offered in the System. This process was developed in response to concerns that curricula in the System provide:

1. A quality of instruction which makes it possible for individuals completing a curriculum or phase of a curriculum to be prepared for employment;
2. Articulation between secondary and post-secondary vocational/technical curriculums;
3. Involvement of employers, employees, and educators in curriculum development; and
4. Assurance that curricula are up-to-date in accordance with current job technology requirements.

In response to these concerns, the project is designed to provide (1) a validated list of career (job) opportunities for which each curriculum provides training and education; (2) the tasks performed by employees in each job; (3) a list of competencies and evaluative criteria essential to successfully perform in the job; (4) curriculum guidelines; and (5) curriculum materials based on the competencies. These tasks, competencies, and guidelines will be used to develop curricula with multi-entry, multi-exit levels that are based on job requirements and provide for upward mobility of students.

In January, 1980, the State accreditation process was eliminated. It appeared that it had served its original intent after all 57 institutions had received both State and regional accreditation. However, the evaluation instrument which was developed will be used in evaluating all programs currently being offered in the Community College System. This model reflects some of the criteria specified for compliance in order to receive Federal funds for vocational education programs. This model is available to the institutions upon request.

In July, 1979, a MIS Task Force was formed to assess the Community College System's process of data collection. One of the purposes of this Task Force is to determine if additional data or resources are needed for more effective decision-making relative to program evaluation.

pollution appears to originate from industrial sources, although off-shore oil wells and pipelines also contribute to water pollution. In India, the major sources of water pollution are industrial wastes and sewage. The industrial wastes include effluents from textile, leather, paper, chemical, oil refineries, etc., which contain organic and inorganic pollutants. The sewage contains organic wastes, such as human waste, animal waste, and industrial wastes. A large number of untreated sewage discharge into rivers and lakes, causing serious pollution of water bodies.

The degradation of groundwater has been caused by the infiltration of industrial wastes and agricultural chemicals. The infiltration of industrial wastes into groundwater is due to the leakage of industrial wastes through pipes and tanks, or through the disposal of wastes directly into the ground.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

Industrial wastes and agricultural chemicals are the major causes of water pollution. The infiltration of industrial wastes into groundwater is due to the leakage of industrial wastes through pipes and tanks, or through the disposal of wastes directly into the ground.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides. The infiltration of agricultural chemicals into groundwater is due to the use of fertilizers and pesticides.

PART IV

CONSIDERATION GIVEN EACH RECOMMENDATION OF THE STATE ADVISORY COUNCIL

RECOMMENDATION 1. DEVELOP AND IMPLEMENT A COMPREHENSIVE EVALUATION SYSTEM.

Secondary

The Division of Vocational Education, State Department of Public Instruction, is very committed to the development and implementation of a comprehensive Statewide evaluation system for vocational education. In response to the North Carolina Public School Laws and the Vocational Education Amendments Act of 1976, but even more directly to the Division's long-held belief that systematic program evaluation is the key to rational decision-making, the development of a comprehensive evaluation system was begun in the early Spring of 1978.

Developmental work and planning progressed throughout 1978 and during the Spring of 1979 a major portion of the evaluation system was subjected to an intensive field-test in nine local education agencies. Activities occurring simultaneously with the field-test included a third-party assessment of the evaluation system by a Statewide consortium of teacher educators, an opinion survey of the 482 teachers involved in the field-test, a formal reaction session involving the nine local directors of vocational education who participated in the field-test, and a third-party assessment of the impact of the evaluation system on the operations of the Division of Vocational Education. Based on the results of the field-test, modifications were made in the evaluation system during the Summer of 1979 and staff training, preparation of materials, and selection of a 20% sample of local education agencies were completed in anticipation of full-scale implementation of the evaluation system during the Fall of 1979. Beginning in the Fall of 1979, evaluations were completed in 29 local education agencies. Each year hereafter, additional 20% samples of the State's 144 local education agencies will be evaluated so that at the end of a five-year period all vocational education programs will have undergone evaluation.

The process is designed to intensively evaluate and provide directions for improvement in local vocational education programs, concentrating specifically on administration, in terms of both planning and supportive services, and the delivery of vocational education instruction in the classrooms, shops, and laboratories of the State. The four instruments used in the evaluation process are (1) a "Planning" instrument which is responded to by the local director of vocational education, (2) a "Supportive Services" instrument which is responded to by the local director and guidance counselors, (3) an "Instructional Program" instrument which is responded to by teachers, and (4) an instrument responded to by teachers of special/supportive programs for disadvantaged or handicapped students.

The evaluation process employs a four step procedure consisting of (1) an orientation session for all local agency personnel, (2) a locally conducted self-study by administrators and teachers, (3) an on-site review conducted by State staff consultants assisted by, in many cases, local advisory committee members, teacher educators, or other knowledgeable

individuals, and (4) an exit conference involving teachers, administrators, and State staff consultants. The results and recommendations of the evaluation are subsequently returned, in the form of a written report, to the local education agency to guide its program improvement efforts and, more specifically, for incorporation into the local planning process.

As time and resources permit, the Division is committed to expansion and improvement of the Statewide evaluation system. Plans are well underway to improve the management information system for vocational education to include a more comprehensive data base on vocational teachers and students, to refine the procedures for follow-up of vocational education program completers and leavers, and eventually, to incorporate a student competency assessment element into the Statewide evaluation system.

Many resources and much energy of the Division is devoted to the evaluation effort. All State staff consultants participate in the evaluation system by assisting in the orientation sessions, conducting on-site reviews, and preparing written reports of the evaluation results and recommendations. Development, planning, and coordination of the overall Statewide evaluation system is the assigned responsibility of the Program Improvement Unit of the Division of Vocational Education.

Post-Secondary

The enactment of the "Community College Act of 1963" recognized the community colleges, technical colleges, and technical institutes as having the responsibility for post-secondary vocational-technical education. Since its inception, the State Board of Education, local administrative boards, and institutional administrators have considered the concept of evaluation, both institutional and programmatic, as a valuable process for insuring educational quality. To reflect this, in 1966, the Division of Institutional Evaluation was established at the State level and standards and evaluative criteria were developed and have been used extensively by institutions as guidelines for operation and development. In 1970, the Board of Education established a policy whereby institutions meeting these standards and evaluative criteria and "upon favorable approval" by a state accreditation screening committee could be granted State accreditation by the State Board of Education. Today, all 57 institutions have achieved both State and regional accreditation.

The State institutional evaluation process has served as a mean of assuring program quality, in that both State and regional accreditation standards specify that periodic evaluation of faculty, instructional effectiveness, follow-up studies of former students, inservice training of personnel, and other pertinent studies should be conducted by the institutions. These functions are conducted periodically by each institution.

Presently, at the State level, a conceptual model for program evaluation has been developed which will be utilized in evaluating any of the over 200 different types of programs offered in the 57 institutions. The model is available for use by the institutions. This model provides one mean for meeting the requirements outlined in the educational amendments of 1976, Title II, Public Law 94-482.

RECOMMENDATION 2. DEVELOP APPROACHES TO EMPHASIZE TECHNICAL EDUCATION.

Secondary

One of the purposes of secondary vocational education is "to prepare individuals for participation in advanced or highly skilled post-secondary vocational and technical education." Currently some of the secondary vocational education programs are designed to do this; however, the secondary vocational education staff will conduct a study during school year 1980-81 to begin looking at possible changes which may be needed to further implement this recommendation. One possibility is the design of certain courses for special groups such as gifted and talented students.

Post-Secondary

Technical education is identified in N. C. General Statutes 115D as one element of the major purpose of each of the institutions in the Community College System. Technical programs are designed to prepare students for entry into paraprofessional fields. These programs are occupational in nature; however, general education courses in the areas of English and social science are included. Even though technical programs are considered college level, they are designed for entrance into employment. Technical programs are normally two academic years in length and lead to an Associate Degree.

Vocational education, including technical education, was and continues to be the cornerstone of institutions in the System.

With increased technological advancement and growth, increased attention is being given to high-skilled occupations, including those at the technical education level. This attention is reflected in several ways:

1. In 1977, the report of the Commission on Goals for the North Carolina Community College System included as one of its six major goals, the following: "To accelerate North Carolina economic growth and development through a dynamic, responsive, relevant, and comprehensive manpower training program." Twenty-two of the 31 members of this commission held positions in the System such as president or member of board of trustees -- individuals who could bring about change in their institutions.
2. In 1979, a study of occupational requirements commissioned by the Department of Community Colleges identified a number of high-skilled, fast-growing occupations in various regions of the State.
3. High priority budget requests in 1979 were made for improving support for manpower training, especially for highly skilled and new industry training programs.
4. Through planning and budgeting, efforts will continue to be made to identify needs and support occupational programs of high priority to State and national development, including those in technical education. For example, a new State Board of Education policy on criteria for approving extension courses specifies that technical and vocational courses of instruction shall be given highest priority.

RECOMMENDATION 3. DEVELOP APPROACHES TO REDUCE PUBLIC SCHOOL DROPOUTS.

Secondary

The State Board of Education recognizes dropping out of school as a major problem in our society and is committed to steps necessary to remedy the situation. Actions implemented by the State Board illustrate the Board's commitment to finding solutions to this problem. The State Board is responding to the concern expressed by the 1979 General Assembly in An Act to Authorize the Legislative Research Commission to Study the Problem of Public School Dropouts in North Carolina.

One response is the recent publication, The Dropout Problem in the Public Schools of North Carolina, North Carolina Department of Public Instruction, Raleigh, North Carolina, January, 1980. In this publication, six major factors have been identified as the primary causes of students dropping out of the public schools of North Carolina. These factors are being studied to determine strategies needed to correct the situation.

Another response is the broadened policy of the State Board relative to Extended School Day programs. The broadened policy includes the concept of Extended School Day in the total school day and allows for funding from regular school funds.

A third response is exhibited in the Board's commitment to expand vocational education opportunities in the 1980's. The Board proposes to expand the program to serve a larger proportion of secondary school students, including, but not limited to:

1. Expanding secondary vocational education offerings,
2. Expanding secondary vocational education efforts to meet the needs of special target groups, and
3. Expanding apprenticeship efforts.

The State Board is preparing to seek funds from the General Assembly to implement its commitment to reduce school dropouts.

Post-Secondary

Probably the most reliable predictor of educational attainment of children is the educational level of their parents. Less than half the citizens of North Carolina over twenty-one years of age have a high school diploma. A major factor in reducing dropouts in North Carolina must be better educated parents.

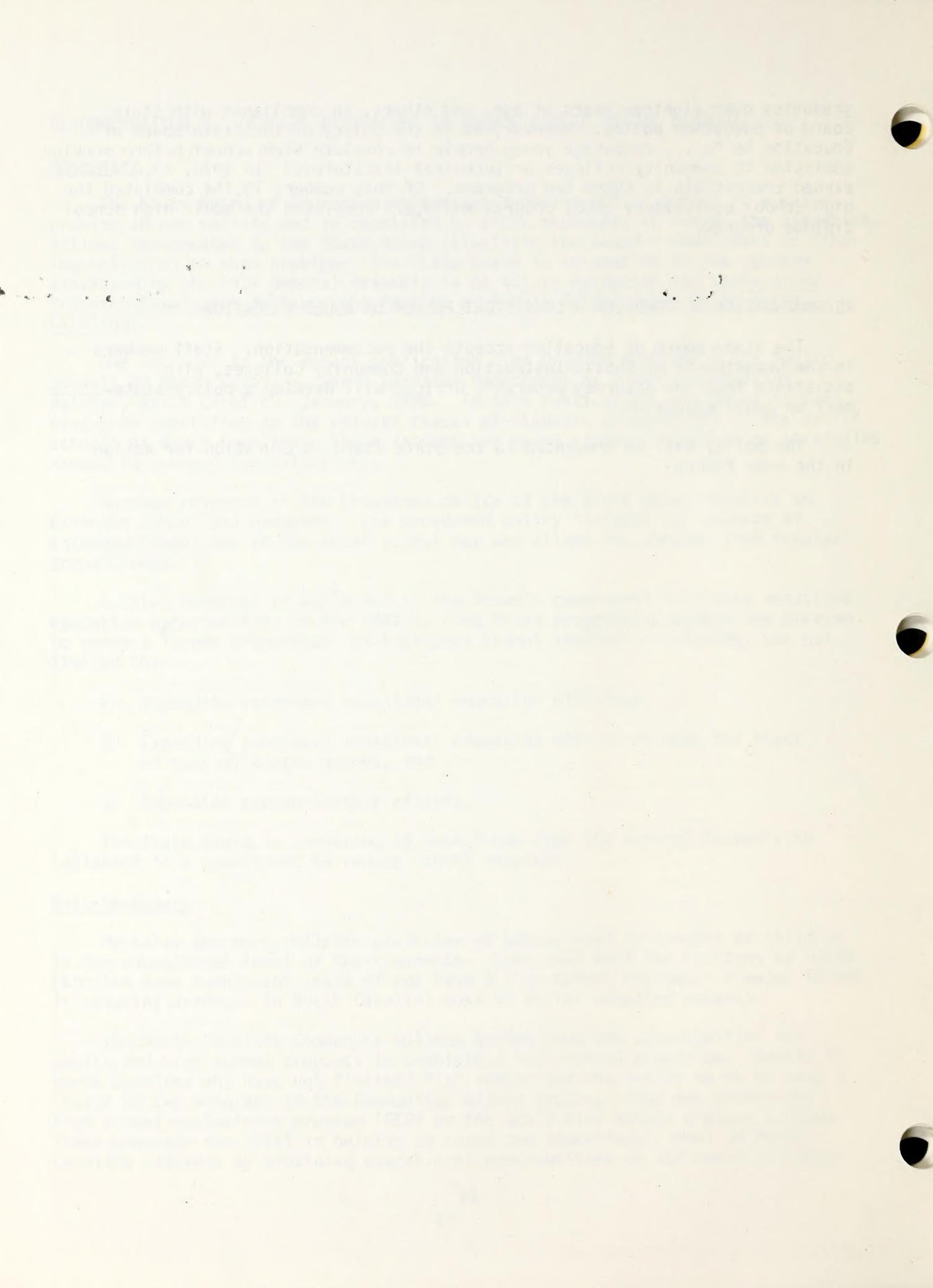
The North Carolina Community College System provides opportunities for adults and high school dropouts to complete a high school education. Adults in North Carolina who have not finished high school and who desire to do so have a choice of two programs in the Community College System. They may choose the high school equivalency program (GED) or the adult high school diploma program. These programs are vital in helping to raise the educational level of North Carolina citizens by providing educational opportunities to all non-high school

graduates over eighteen years of age, and others, in compliance with State Board of Education policy. However, it is the policy of the State Board of Education to ". . . encourage young people to complete high school before seeking admission to community colleges or technical institutes." In 1978, 19,029 adults earned credentials in these two programs. Of this number, 15,154 completed the high school equivalency (GED) program and 3,875 completed the adult high school diploma program.

RECOMMENDATION 4. DEVELOP A CONSISTENT POLICY ON ADULT EDUCATION

The State Board of Education accepts the recommendation. Staff members in the Departments of Public Instruction and Community Colleges, with assistance from the Attorney General's Office, will develop a policy statement on adult education.

The policy will be presented to the State Board of Education for action in the near future.







D8.8-D83/8



WILSON JONES
COOKE & COBB DIVISION
REDI-COVERTM
448-13 B
.020 GENUINE PRESSBOARD
MADE IN U.S.A.